# Gardening and Lawn Care Resources

The City of Gaithersburg is committed to educating the community on the value of Integrated Pest Management. The following organizations provide free information on controlling specific pests in the garden and home:

# **University of Maryland Cooperative Extension**

http://www.agnr.umd.edu/MCE/index.cfm

#### **Montgomery County Extension Office**

301-590-9638 http://www.agnr.umd.edu/Montgomery/ index.cfm?top=32

#### **Home and Garden Center**

800-342-2507

http://www.agnr.umd.edu/users/hgic/home.html

# Montgomery County Department of Environmental Protection

http://www.co.mo.md.us/services/dep/IPM/ipmtips.htm

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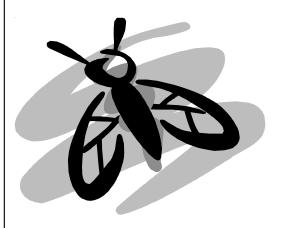
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# **Integrated Pest Management**



Safe Environmental Practices for Gardeners, Home Owners and Landscapers

www.ci.gaithersburg.md.us



City of Gaithersburg 31 S. Summit Ave. Gaithersburg, MD 20877 301-258-6310 www.ci.gaithersburg.md.us

#### **Facts About Pesticides**

Pesticides include insecticides, herbicides, fungicides and various other substances used to control pests (insects, rodents, weeds, fungi or microorganisms). Improper use of pesticides may cause problems:

- Pesticides not only kill garden invaders; they also harm useful insects, poison fish and contaminate ground water and the Chesapeake Bay.
- Pesticides are sometimes not effective because pests can become resistant to the chemicals.
- Pesticides are often tracked from the garden into the home, where children, pets and the elderly may be exposed to the chemicals.



## Planning for a Healthier Environment Using Integrated Pest Management (IPM)

Integrated Pest Management (IPM) integrates a variety of best management strategies to economically manage pest problems with little or no use of toxic materials to pose the least possible hazard to people and the environment. A major part of an IPM program is determining the number of pests that can be tolerated without causing unacceptable damage or annoyance. Pests are treated only when they reach that level.

#### To Treat or Not to Treat

IPM involves a decision-making process to determine whether, when, and how to treat pest problems. Ask yourself the following questions:

- Is real damage taking place, or is it cosmetic?
- How many pests are present and will that number cause serious damage?
- Are any natural enemies such as spiders, ladybugs and lacewings present? If so, you may want to postpone treatment to see if these natural enemies will solve the problem.
- How many pests can you tolerate? IPM encourages people to determine their tolerance levels and experiment with tolerating a greater number of pests in situations where the damage is not serious.

#### **How to Use IPM**

IPM integrates a number of treatment methods into a comprehensive plan for managing pests.

- 1. Preventative measures include designing the garden with native plants to minimize pest problems and doing routine maintenance to keep plants as healthy as possible.
- Physical controls include caulking holes to prevent entry; creating barriers or traps; hand picking weeds; installing special fabric to inhibit weeds; and putting in copper straps to deter slugs and snails.
- Biological controls use natural predators (ladybugs, spiders, lacewings) to remove pests.
- 4. Least toxic chemical controls are the last resort option. If you use chemicals, consider their safety for humans, pets and the environment. Look for environmentally friendly products like insecticide soaps and oils, boric acid and borate.

### Safe Substitutes for Pest Control

**Garden Aphids and Mites**: Mix 1 tablespoon of liquid soap and 1 cup of vegetable oil. Add 1 teaspoon of this mixture to a cup of water and spray. (Oil may harm vegetable plants in the cabbage family.)

**Caterpillars**: When caterpillars are eating, apply products containing Bacillus thuringiensis to leaves.

**Ants**: Place boric acid powder or hydramethylnon baits in problem areas, cracks and insect walkways. It is a mild poison, so be sure it is inaccessible to children and pets.

**Roaches**: Apply boric acid powder to cracks and entry points (see ants above). Place bay leaves on pantry shelves.

If you must use a pesticide: Use a pesticide that is specifically designed to control your pest. Read labels and use only as directed!

## **Pesticide Disposal**

Dumping toxics into the street, gutter or storm drain is illegal! Household toxics can pollute our local streams and the Chesapeake Bay if disposed of in storm drains or gutters.

- ▶ Rinse empty pesticide containers and use rinse water as you would the product.
- Dispose of empty rinsed containers in the trash.
- Unused household toxics should be disposed of at a Montgomery County Household Hazardous Waste Collection Event (for details visit http://solidwaste.dpwt.com).